The Perpetual Professor in the 21st Century University

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Introduction

The environment in which higher education instruction takes place has changed dramatically in the last two decades. In the past, traditional instruction took place in classrooms where the Professor lectured and the students dutifully took notes, researched topics in libraries, sometimes reflected in small groups and produced academic tomes. Technology has clearly impacted nearly every aspect of communications and pedagogy. Students expect professors to be digitally savvy even as many traditionalists are pushing to maintain older modes of face-to-face educational delivery and relationships with students that are not hindered by cyber-modality.   Nowhere is this more apparent than in the way which students interact with instructors outside of the traditional classroom.

Background

A primary factor in this change is the accessibility of electronic mail and other portable communications devices which have the potential of connecting the student and individual faculty 24 hours per day, seven days per week. This creates significant pressures on faculty time and raises issues of faculty workload that can be of particular concern in a unionized environment. As required faculty office hours are stipulated in the collective bargaining agreement (CBA) between the Pennsylvania State System of Higher Education (PASSHE) and the Association of Pennsylvania State College and University Faculties (APSCUF). The change in accessibility to technology and its impact on student access to Professors both during conventional working hours and after hours is not addressed in the CBA.

However, evidence exists that changes have taken place regarding how students are contacting Professors and the extent to which they are using alternative modes of contact. Lih-Ching and Beasley (2006) explored how modern communications technologies, such as e-mail and Instant Messenger, impacted the tradition of instructor office hours. They also note that the perpetual access of students to their instructors poses a real problem for professors if there are no defined boundaries for student access.

Li and Pitts (2009) discuss the use of *Facebook* instant messaging as a method of communications with both nontraditional and traditional undergraduates. Their findings suggest that students do not use virtual office hours much differently than they utilize face-to-face meetings. However, students reported they are more satisfied with on-line interactions than with face-to-face. Indeed, there is an argument documented by Hickerson and Gigolo (2009) that technology, such as instant messaging, enhances students' educational experiences and enhances the quantity and quality of interactions with their instructor(s). They also find that faculty view the new technologies as offering new teaching tools that support rather than hinder instructional needs. The data also suggest instant messaging does not decrease other forms of faculty-student communication. Overall, both students and instructors found instant messaging a useful educational tool.

Some research has been conducted concerning the use of email as a mode of contact between Teaching Assistants (TAs) and undergraduates but little has been conducted concerning the impact that e-mail and other portable communications devices have had on the relationships between faculty and students. In regards to the experiences of TAs, it was found that these individuals used email extensively but that there was a feeling of being overburdened by the amount of student email, that email increased their workload and that they preferred not to communicate with students over email (Osterlund and Robson, 2009.)

This study examines how technology has impacted faculty-student interaction. It is the first in a series of planned studies and explores this issue from the perspective of the faculty member. In this initial work, the focus is on office hours, cell phone and email usage, and current and past patterns of faculty-student interaction. The intent is this will serve as a pilot study and establish the groundwork for expanded investigations of such issues as student perception of professor availability and interest, quality of instruction, and changes in informal communications patterns. These studies should also help us see the costs to faculty caught in the rush of rapid technological change.

Methodology

To assess how technology is impacting faculty-student interaction, an online survey was conducted using *Qualtrics*' web-based survey tool. The survey was conducted in September 2009. An email was sent to all members of the faculty who had an assignment for the Fall 09 semester asking them to participate in the survey. One week after the initial email, a reminder email was sent to those who had not responded to the original request.

Of the 775 faculty on the total list, 278 responded to our survey providing a very good response rate of 35.9%. The distribution of responses by faculty rank is presented in Table 1. Overall, the distribution suggests we have a sample that should provide a clear sense of typical faculty responses.

Table 1 – Responses by Faculty Rank

Faculty Rank	# Responses	% Responses
Instructor	36	12.9%
Assistant	74	26.6%
Associate	77	27.7%
Professor	91	32.7%
Total	**278**	**100.0%**

Findings

In examining the impact of technology on faculty-student interaction, this study focuses on five basic questions. It begins with an examination of faculty office hours then examines cell phone and email usage and patterns of faculty-student interaction.

Office Hours - To begin our study, we focused on how many hours faculty are available in their office to meet with students. Under the terms of Article 23.A.1.c of the CBA, faculty members are required to have five scheduled office hours per week. Table 2 indicates that faculty are in their offices and available to students far more than required by the contract. Over 80% of the faculty respondents are available more than the required five hours per week and 45% are available eleven or more hours per week. The average amount of office hours was 13.5 hours per week - more than two and a half times the CBA requirement.

Table 2 – Faculty Office Hours and Availability

Office Hours per Week	# Respondents	% of Respondents	Cumulative Response	Cumulative %
0-5	54	19%	54	19%
6-10	101	36%	155	56%
11-15	48	17%	203	73%
16-20	29	10%	232	83%
21-25	15	5%	247	89%
26-30	17	6%	264	95%
31 +	14	5%	278	100%

Discussion: Even as electronic communication expands, it is clear that faculty do recognize the value of being physically present to meet with students. As we explore faculty-student interaction patterns in more detail, this will be an important factor to bear in mind.

Cell Phones – The next area of exploration deals with cell phone usage and practices. As can be seen from Table 3, over 60% of faculty respondents say they use a cell phone on a regular basis and about 9% say they do not use a cell phone.

Table 3 – Cell Phone Usage by Faculty

Cell Usage	# Responses	% Responses
Regular	174	63%
Limited	79	29%
Do Not Use	24	9%
Total	**277**	**100%**

Having established this baseline, a follow-up question is if those who use a cell phone make their number available to students. Table 4 presents the data for both regular and limited users of cell phones. We can see that the majority of respondents do limit access to their cell phones. Of the regular and limited users, just over one-half (52%) do not share their cell phone number with students. As expected, those who use a cell phone on a limited basis were

less likely to share their number with over 70% of this group not sharing cell numbers compares to 43% for regular users.

Table 4 – Sharing of Cell Phone Number

Sharing Cell Phone Number with Students	% Regular Users	% Limited Users	% Regular & Limited Users
Do not share number	43%	71%	52%
Special cases	34%	22%	30%
Advisees	8%	4%	7%
Students in their classes	14%	5%	11%
Any student who requests	7%	4%	6%
Posted on syllabus	12%	5%	10%
Posted on website	2%	0.0%	2%
# Respondents	**174**	**79**	**253**

However, 30% of faculty share their number in special cases such as with student employees, interns or those working on research with the faculty member. When we look at more general sharing of cell phone numbers, we find that it is limited. Some faculty will provide the number to advisees (7%) or students in their classes (11%). We also find that 10% of respondents include it on their syllabus and 2% post it on their website.

Discussion: While cell phones are a convenient and readily accessible form of communication, it is not surprising that faculty limit access by restricting distribution of their number. The easy access that cell phones provide can conflict with privacy and time needed by faculty for other academic work. This can be compounded by student work/sleep schedules as they are much more likely to keep later hours. Finally, the cost of cell phone calls and service cannot be overlooked as a factor especially with the costs of receiving calls from students using another carrier.

Email Policies – Over the last 15 years, email emerged as a major mode of communications. University provided email service for faculty and students is now the standard. At IUP, university policy developed in cooperation with the University Senate establishes email as an official means of communication. In addition, the University implemented anti-spoofing and authentication protocols to assure the identity of the sender and authenticity of the message. This maintains FERPA consistent identification and enables faculty to communicate safely with students when both use IUP email accounts.

Given the pervasiveness of email usage, we explored two questions concerning the role of email in faculty-student interaction. First, we asked faculty if they advise students in the

course syllabus as to how quickly they will respond to emails. We found that 56% of our respondents do include such a statement.

Table 5 – Response Time Provided in Syllabus and Faculty Response Patterns

Response Time	Time In Syllabus	Time Not in Syllabus	Total
4 hrs or next day	58%	55%	57%
6 hrs or next day	12%	15%	14%
8 hrs or next day	10%	11%	10%
24 hrs	17%	12%	15%
48 hrs	2%	7%	4%
Over 48 hrs	1%	0%	1%
# Responses	**153**	**121**	**274**

Our second question focused on how quickly faculty seek to respond to email messages from students. As Table 5 shows, Over 80% try to respond within eight hours or the next day if after hours. To be responsive to students, 57% try to respond within four hours. The response pattern is remarkably similar whether or not the faculty members include a statement in the syllabus as to how quickly they will respond to emails.

Discussion: Email has become a generally accepted modality of faculty-student interaction. As our data show, faculty attempt to respond quickly to student emails. It is a viable channel for interacting with students on a regular basis but without the intrusiveness that can occur from cell phones. This enables faculty to have a degree of control over the time of interaction while maintaining high levels of interaction. Factoring in the large amount of time faculty are available in their offices with their email response patterns suggests faculty are very available to students but want some degree of control over the time parameters – something that cell phone communication cannot readily provide.

Current Interaction Patterns – The next phase of our analysis looked at the frequency of faculty-student interactions via a range of modalities. As Table 6 shows, email is the leading means of faculty-student contact outside of class. Of our sample, 72% of faculty received eleven or more email contacts each week and 29% reported 21 or more such contacts. In contrast, office visits, while placing second overall, had only 30% of faculty reporting eleven or more such contacts per week. Phone calls, written notes and text messages also rated much lower.

Table 6 – Current Methods of Faculty-Student Interaction

Contacts per Week	Visits	Email	Phone Calls	Text Messages	Written Notes
Little 0-5	34%	8%	73%	92%	90%
Some 6-10	36%	21%	20%	4%	7%

Moderate 11-15	18%	22%	4%	2%	2%
Frequent 16-20	8%	21%	3%	1%	0%
Very Frequent 21+	4%	29%	0%	0%	1%
# Responses	**277**	**276**	**274**	**273**	**273**

Discussion: Email is clearly an important method of faculty-student interaction. It does not impinge on faculty or student privacy and its asynchronous nature makes it less time constrained. The restricted distribution of cell phone numbers likely contributes to the reduced extent of phone calls and text messages. Also of note is that 66% of faculty still report student visits of six or more times per week. This suggests that time in the office and the traditional office hour is still viable and important to students.

<u>Changes in Interaction Patterns</u> – The final component of our study asked faculty to assess how interaction patterns with students have changed over the past decade. Table 7 presents this data. The emergence of email is clearly seen with 68% of faculty reporting a considerable increase (30%+) in the volume of emails. At the same time, we see the overall volume of student contacts also shows a strong increase with 63% of faculty reporting an increase of 5% or more and 19% seeing an increase of more than 30%. Only 9% of faculty reported a decline in the number of contacts. In person visits did see a decline reported by 45% of faculty with 21% seeing a considerable decline. As Table 6 showed, however, student visits remains a common form of contact second only to emails.

Table 7 – Changes in the Last Ten Years in Faculty-Student Interaction

Change in Contacts per Week	Visits	Email	Phone Calls	Text Messages	Written Notes	All Contacts
Considerable Decline 30%+	21%	0%	15%	8%	23%	1%
Some Decline 5-30%	24%	0%	25%	0%	24%	8%
No Change +/- 5%	43%	8%	47%	79%	51%	28%
Some Increase 5-30%	10%	25%	10%	6%	2%	44%
Considerable Increase 30%+	3%	68%	4%	7%	0%	19%
# Responses	**241**	**240**	**236**	**221**	**234**	**239**

Discussion: The emergence of email and its ability to overcome the restrictions of time and place are important considerations. Overall faculty-student interaction is increasing and email is the primary driver behind this growth. In contrast, phone calls and text messages have not

emerged as major elements. The limited distribution of cell phone numbers, perhaps driven by concerns of privacy and costs, is most likely an inhibiting factor here.

<u>Conclusion</u>

This study focused on patterns of faculty-student interaction and the impact that technology has on this relationship. Regardless of the benefits of technology, faculty members are still available in their offices to see students much more than the contractually mandated five hours per week. Respondents have seen considerable growth in email as a means of communication and do try to respond in a timely fashion to students. Email has emerged as the most frequently used method of interaction but office visits still maintain an important role. The end result is increased student demands for faculty time that can conflict with other responsibilities required to support program quality and operations. At the same time, there is a more cautious approach to cell phones and the accompanying text messaging services. This suggests that synchronous communication and privacy concerns plus the potential costs of cell based technologies maybe inhibiting factors.

In reality, the current study should be treated as a pilot exercise laying the groundwork for future research. However, recognizing this, the data appear to support the supposition that the patterns of relationships in regards to out-of classroom meetings has been changing with the growth of new communication technologies. This initial study suggests that greater levels of faculty-student interaction are emerging with email as the primary conduit. In turn, email allows this communication to move beyond the time and place constraints of the traditional office hour. How this will impact student perceptions of faculty responsiveness and quality remains an open question and will be explored in planned studies. At the same time, the expanded role of email communication makes it a greater competitor with scholarship, research and service for faculty time. Taken together, these highlight changing pressures and demands on the university professoriate.

References

Agreement between Association of Pennsylvania State College and University Faculties and the Pennsylvania State System of Higher Education (2007).

Hickerson, C. & Giglio, M. (2009) Instant messaging between students and faculty; A tool for increasing student-faculty interaction. *International Journal on E-Learning*, 8(1) 71-88.

Li, L. & Pitts, J. (2009). Does it really matter? Using virtual office hours to enhance student-faculty interaction. *Journal of Information Systems Education*, 20(2), 175-185.

Lih-Cheng, C. W. & Beasley, W. (2006). Integrating instant messenger into online office hours to enhance synchronous online interaction in teacher education. *International Journal of Instructional Media*, 33(3), 277-287.

Osterlund, K. & Robson, K. (2009) The impact of ICT on work-life experiences among university teaching assistants. *Computers & Education*, 52(2), 432-437.